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APPLICATION N	O. I	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/086,574		02/28/2002	Edward Harrison Teague	020111	9018	
23696	7590	08/05/2005		EXAMINER		
Qualcom	m Incorpor	rated	KIM, KEVIN			
Patents De	epartment				····	
5775 Mor	ehouse Driv	ve	ART UNIT	PAPER NUMBER		
San Diego	o, CA 9212	21-1714	2638			
			DATE MAILED: 08/05/2005			

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application	on No.	Applicant(s)					
	10/086,57	<b>7</b> 4	TEAGUE ET AL.	(kr)				
Office Action Summary	Examiner		Art Unit					
	Kevin Y. K	im	2638					
The MAILING DATE of this communic			correspondence addre	ess				
A SHORTENED STATUTORY PERIOD FO THE MAILING DATE OF THIS COMMUNIC  - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this commu  - If the period for reply specified above is less than thirty (30)  - If NO period for reply is specified above, the maximum statt  - Failure to reply within the set or extended period for reply w Any reply received by the Office later than three months afte earned patent term adjustment. See 37 CFR 1.704(b).  Status	CATION.  f 37 CFR 1.136(a). In no evenication.  days, a reply within the statutory period will apply and will, by statute, cause the apply	ent, however, may a reply be tir utory minimum of thirty (30) day Il expire SIX (6) MONTHS from ication to become ABANDONE	nely filed  s will be considered timely. the mailing date of this comm  (35 U.S.C. § 133).	unication.				
1) Responsive to communication(s) filed		<i>6</i> ' 1						
2a) This action is <b>FINAL</b> . 2b) This action is non-final.								
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
·	s under Ex parte Qu	ayre, 1900 O.D. 11, 40	55 O.G. 215.					
Disposition of Claims				•				
4) Claim(s) <u>12,13,15,17-26,28,29,31 and</u>	<u>d 32</u> is/are pending i	n the application.						
4a) Of the above claim(s) is/are	withdrawn from co	nsideration.						
5) Claim(s) <u>19-26,28,29,31 and 32</u> is/are allowed.								
6) Claim(s) <u>12,13,15,17 and 18</u> is/are re	jected.							
7) Claim(s) is/are objected to.								
8) Claim(s) are subject to restricti	on and/or election re	equirement.						
Application Papers								
9) The specification is objected to by the	Examiner.							
10) The drawing(s) filed on is/are:	a) accepted or b)	objected to by the	Examiner.					
Applicant may not request that any object	ion to the drawing(s) b	e held in abeyance. Se	e 37 CFR 1.85(a).					
Replacement drawing sheet(s) including to	he correction is require	ed if the drawing(s) is ob	jected to. See 37 CFR	1.121(d).				
11)☐ The oath or declaration is objected to l	by the Examiner. No	te the attached Office	Action or form PTO-	152.				
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for a) All b) Some * c) None of:	or foreign priority und	der 35 U.S.C. § 119(a	)-(d) or (f).					
1. ☐ Certified copies of the priority d	ocuments have bee	n received.						
2. Certified copies of the priority d	ocuments have bee	n received in Applicati	on No					
3. Copies of the certified copies of	f the priority docume	nts have been receive	ed in this National Sta	age				
application from the Internation	,	• • • •						
* See the attached detailed Office action	for a list of the certif	ied copies not receive	ed.					
Attachment(s)		· · · · · · · · · · · · · · · · · · ·						
1) Notice of References Cited (PTO-892)	0.040	4) Interview Summary						
Notice of Draftsperson's Patent Drawing Review (PTo 3) Information Disclosure Statement(s) (PTO-1449 or P Paper No(s)/Mail Date		Paper No(s)/Mail Da 5) Notice of Informal F 6) Other:	ate Patent Application (PTO-15	2)				
U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)	Office Action Summar	у	Part of Paper No./M	ail Date 3				

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#### **DETAILED ACTION**

### Response to Arguments

1. Applicant's arguments, filed May 19, 2005, with respect to the rejection(s) of claim(s) 12,13,15,17 and 18 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a newly found prior art as set forth below.

### Claim Rejections - 35 USC § 103

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over La Rosa et al (US 6,078,611 previously cited but not used)

La Rosa et al discloses a method of time-tracking a plurality of fingers (122,124,126,128) in a Rake receiver, see Fig.1, comprising;

restricting each finger from tracking outside motion limits for that finger, see Fig.7 illustrating assigned ranges for finger timings,

determining the motion limits for a finger in accordance with the position of one or more adjacent fingers, see col. 4, lines  $52 \sim 55$ , describing a minimum separation between the finger timings,

La Rosa et al fails to teach that "no advance limit is set for a finger with no adjacent finger ahead in time within a pre-determined offset limit" or that "no retard limit is set for a finger with no adjacent finger behind in time within a pre-determined offset limit." In

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other words, the first finger in time of the Rake receiver is allowed to advance without a limit. However, the timing tracking method of La Rosa et al is to prevent fingers from merging while tracking a received signal. See col.2 lines 22-23. It follows that a finger that would not merge with another finger when moved in time needs no limit in that direction. Such fingers are the first finger and the last finger, which do not have an adjacent finger ahead in time and an adjacent finger behind in time respectively. Thus, it would have been obvious to one skilled in the art at the time the invention was made to remove an advance limit for the first finger and a retard limit for the last finger of the Rake receiver of La Rosa et al because there is no need for such a limit.

## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 5. Claims 15,17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by La Rosa et al. (US 6,078,611 previously cited but not used)

### Claim 15.

La Rosa et al discloses a method of time-tracking a plurality of fingers (122,124,126,128) in a Rake receiver, see Fig.1, comprising;

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restricting each finger from tracking outside motion limits for that finger, see Fig.7 illustrating assigned ranges for finger timings,

regenerating the motion limits periodically, see col. 4, lines  $52 \sim 55$ , describing a minimum separation between the finger timings.

#### Claims 17 and 18.

La Rosa et al discloses a method of time-tracking a plurality of fingers in a Rake receiver, (see col.2, lines 23-28) comprising;

restricting each finger from tracking outside motion limits for that finger, see Fig.7 illustrating assigned ranges for finger timings,

regenerating the motion limits subsequent to the issuance of a time-tracking command, see col. 4, lines  $52 \sim 55$ , describing a minimum separation between the finger timings, which requires an "issuance of a time-tracking command."

### Allowable Subject Matter

6. Claims 19-26,28,29,31 and 32 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Y. Kim whose telephone number is 571-272-3039. The examiner can normally be reached on 8AM --5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Venderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PATENT EXAMINER